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**THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
CENTRAL STATISTICAL AUTHORITY**

AGRICULTURAL SAMPLE SURVEY

2000/2001 (1993 E.C.)

(September 2000 - February 2001)

VOLUME I

REPORT ON

**AREA AND PRODUCTION FOR
MAJOR CROPS**

FOR

(PRIVATE PEASANT HOLDINGS, MEHER SEASON)

**ADDIS ABABA
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ABBREVIATIONS

CSA - CENTRAL STATISTICAL AUTHORITY

CV - COEFFICIENT OF VARIATION

EC - ETHIOPIAN CALENDAR

HA - HECTARE

QT - QUINTAL

SE - STANDARD ERROR

SNNPR - SOUTHERN NATIONS, NATIONALITIES AND PEOPLES REGION

PART I

INTRODUCTION AND OBJECTIVES OF THE SURVEY

I. INTRODUCTION

The health and wealth of a nation and its potential to develop and grow depend on its ability to feed its people. To help ensure that food will remain available to those who need it, there is nothing more important to give priority to than agriculture. Accurate and timely statistics about the basic produce and supplies of agriculture are essential to assess the agricultural situation. To help policy makers deal with the fundamental challenge they are faced with in the agricultural sector of the economy and develop measures and policies to maintain food security, there should be a continuous provision of statistics. The collection of reliable, comprehensive and timely data on agriculture is thus required for the above purposes. In this perspective, the Central Statistical Authority (CSA) has endeavoured to generate agricultural data for policy makers and other users.

This bulletin contains one of the series of the 2000/2001 (1993 E.C) Agricultural Sample Survey (AgSS) results, i.e. area and production of Meher Season, for the major crops produced within the private peasant holdings sector of the economy. The report consists of three parts: Part I includes the objectives of this annual survey, Part II deals with coverage and content of the survey, sample design, field organization, training of field staff, method of data collection and Part III encompasses survey

estimates of area, production and yield of major crops. Estimation procedures and formulation for estimates of totals, ratios, and variance are presented in Appendix I.

Estimates of the standard errors with the corresponding coefficients of variations for area and production of the major crops are presented in Appendix II, the number of agricultural households covered, parcels, fields measured, and number of crop cuttings performed are presented in Appendix III and the survey questionnaires in Appendix IV.

2. Objectives of the survey

The general objective of CSA's Agricultural Sample Survey (AgSS) is to collect basic quantitative information on the country's agriculture that is considered essential for development planning, socio-economic policy formulation, food security, etc. The AgSS is composed of four components: Crop Production Forecast Survey, Meher Season Survey, Livestock Survey, and Survey of the Belg season crop area and production.

The specific objectives of the Meher season area and production survey are to estimate the total cultivated land area, production and yield per hectare of major crops (temporary). Companion reports are published separately with estimates of land use and quantity of agricultural inputs applied by type for the Meher and Belg seasons. All reports are based on the private peasant holdings in sedentary rural areas of the nation, further subdivided by regions and zones.

PART II

SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING

1. Scope, Coverage and Content of the Survey

The 2000/2001 (1993 E.C) annual Agricultural Sample Survey used a sampling frame which was designed to cover the sedentary rural agricultural population in all regions of the country (urban and nomadic areas were not included in the survey). Illustrated in Table A is a breakdown of the sample distribution as expressed by regions, zones and weredas. A total of 55 zones and 412 weredas were actually covered by the survey.

The area sampling unit used for this survey is defined as an Enumeration Areas (EAs) as defined for the 1994 Population and Housing Census. For the 2000/2001 AgSS a total of 1430 enumeration areas were selected from all regions of the country. Due to various reasons, 8 EAs were not covered in the survey which resulted in the survey actually covering 1422 Enumeration Areas (EAs). From each of the selected EAs a representative sample of forty agricultural households were selected to represent the agricultural population of the sampled EA.

Of these forty agricultural households, the first twenty-five were used for obtaining information on area under crops, Meher and Belg seasons' production of crops, land use, agricultural practices, crop damage, and quantity of agricultural inputs used. It is important to note that of the total forty agricultural households sampled in each of the selected EAs, data on

crop cutting were collected for only the fifteen (11th -25th) households selected.

Table A: Area Coverage of the 2000/2001 Agricultural Sample Survey

REGION	NUMBER OF ZONES / SP. WEREDAS			NUMBER OF WEREDAS		
	TOTAL	COVERED	NOT COVERED	TOTAL ³	COVERED	NOT COVERED
TIGRAY ¹	5	4	1	33	33	-
AFAR ²	5	2	3	8	5	3
AMHARA ¹	11	10	1	93	92	1
OROMIYA	12	12	-	171	170	1
SOMALIE ²	9	3	6	9	9	-
BENISHANGUL_GUMUZ	3	3	-	18	18	-
SNNP	14	14	-	73	73	-
GAMBELLA ²	4	3	1	5	5	-
HARARI	1	1	-	1	1	-
ADDIS ABABA ¹	6	2	4	5	5	-
DIRE DAWA	1	1	-	1	1	-
TOTAL	71	55	16	417	412	5

Note

1= Zones not covered in these regions are urban.

2 = Zones not covered in these regions are not inhabited by significant number of sedentary population.

3 = Numbers of total weredas signify those weredas in covered zones of the respective regions.

SNNP = Southern Nations, Nationalities and Peoples.

2. Concepts and Definitions

In order to collect standardized data of acceptable quality, the same concepts and definitions must be used by all field enumerators during data collection. Below are defined some of the more important concepts and terms used in the survey.

Enumeration Area (EA) an enumeration area in the rural parts of the country is a locality that is less than or equal to a farmers' association in geographical area and usually consists of 150-200 households.

Household : a household may be either,

a) a one person household, that is a person who makes provisions for his own living without combining with any other person to form part of a multi-person household or

b) a multi person household, that is, a group of two or more persons who live together and make common provisions for food and other essentials of living. The persons in the group may pool their incomes and have a common budget to greater or lesser extent. They may be related or unrelated persons, or a combination of both. These persons are taken as members of the household.

Agricultural household : a household is considered an agricultural household when at least one member of the household is engaged in growing crops and/or breeding and raising livestock in private or in combination with others.

Holder : a holder is a person who exercises management control over the operations of the agricultural holding and makes the major decision regarding the utilization of the available resources. He has primary technical and economic responsibility for the holding. He may operate the holding directly as an owner or as a manager. Under conditions of traditional agricultural holding the holder may be regarded as the person, who with or without the help of others, operates land /or raises livestock in his own right, i.e. the person who decides on which, where, when, and how to grow crops or raise livestock and has the right to determine the utilization of the products.

Holding : a holding is all the land and/or livestock kept which is used wholly or partly for agricultural production and is operated as one legal entity by one person alone, or with others without regard to management, organization, size, or location.

Parcel : a parcel of holding is any piece of land entirely surrounded by land and / or water and / or road and /or forestetc. which is not part of the holding. It may consist of one or more cadastral units, plots or fields adjacent to each other.

Field : a field is defined as any plot of land which is a parcel or part of a parcel under the same or mixed crops or any other form of private holding.

Meher (main) season crop : any crop harvested between Meskerem (September) and Yekatit (February) is considered as Meher season crop.

Belg season crop : any crop harvested between the months of Megabit (March) and Nehase (August).

Temporary crops : temporary crops are crops which are grown in less than a year's time, sometimes only a few months with an objective to sow or replant again for additional production following the current harvest. Continuously grown crops planted in rotation are also considered temporary crops since each is harvested and destroyed by ploughing in preparation for each successive crop.

Permanent crops are crops which are grown and occupy land for a long period of time, not requiring replanting for several years after each harvest, are considered permanent crops. All fruit trees (i.e. oranges, mandarins, banana, etc.) and tree crops (i.e. coffee, tea, etc.) are considered permanent crops, but meadows and pastures are excluded.

2. SAMPLE DESIGN

The 2000/2001 (1993 E.C.) Meher season agricultural sample survey covered the rural part of the country except three zones in Afar Regional state and six zones in Somalie Regional state that are predominantly nomadic. A two-stage stratified sample design was used to select the sample. Each zone/special wereda was adopted as stratum for which major findings of the survey are reported except the four regions; namely, Gambela, Harari, Addis Ababa and Dire Dawa which were considered as

strata/reporting levels. The primary sampling units (PSUs) were enumeration areas (EAs) and agricultural households were the secondary sampling units. The survey questionnaires were administered to all agricultural holders within the sample households. A fixed number of sample EAs was determined for each stratum/reporting level based on precision of major estimates and cost considerations. Within each stratum EAs were selected using probability proportional to size systematic sampling; size being total number of agricultural households in the EAs as obtained from the 1994 population and housing census. From each sample EA, 40 agricultural households were systematically selected for the annual agricultural sample survey from a fresh list of households prepared at the beginning of the field work of the annual agricultural survey. Of the forty agricultural households, the first twenty five were used for obtaining information on area under crops, Meher and Belg season production of crops, land use, agricultural practices, crop damage, and quantity of agricultural inputs used. It is important to note that of the total forty agricultural households sampled in each of the selected EAs, data on crop cutting were collected for only the fifteen households (11th-25th households selected).

A total of 1,430 EAs were selected for the survey. However, 8 EAs were closed for various reasons beyond the control of the Authority and the survey succeeded in covering 1422 (99.44 %) EAs. With respect to ultimate sampling units, for the Meher season agricultural sample survey, it was planned to cover 35,750 agricultural households. The response rate was found to be 99.14%. Distribution of the number of sampling units sampled

and covered by strata is given in appendix I. Estimation procedures of parameters of interest (total and ratio) and their sampling error is presented in appendix II

4. Field Organization

All the 22 Branch Statistical Offices of the CSA participated in the survey undertaking, especially in organizing the second stage training, in deploying the field staff to their respective sites of assignment, in supervising the data collection, and retrieving completed questionnaires and submitting them to the head office for data processing. They were also responsible in administering the financial and logistic aspect of the survey within their areas of assignment. In the data collection of the survey, a total of 1558 enumerators and 336 field supervisors were involved with an average supervisor-enumerator ratio of 1 to 5. To accomplish the data collection operation, all the enumerators were supplied with the necessary survey equipment at the completion of the training. To assist the data collection activities in deployment, supervision and retrieval of completed questionnaires, a total of 143 four-wheel vehicles were used. Table B shows distribution of the field staff and vehicles by branch offices.

5. Training of Field Staff

The field staff training program was carried out in two stages. The first stage consisted of training of staff from the head office, Branch Statistical Office Heads and senior field supervisors. This training was given for a period of one week at CSA's headquarters in Addis Ababa. Many of these personnel trained in the first stage were assigned to conduct similar training

for field supervisors and enumerators for fifteen days in all the twenty-two CSA Branch Statistical Offices which are distributed all over the country. During this second stage of training, the field staff were given detailed classroom instruction on the objectives and uses of the AgSS, concepts and definitions of terms used, the method of area measurement, method of crop cutting, correct interviewing procedures, ... etc. The training of the enumerators and supervisors also included field practice to reinforce the understanding of the concepts, definitions and theories discussed in the classroom with regard to field measurement and crop cutting methods.

**TABLE B : DISTRIBUTION OF FIELD STAFF AND VEHICLES
BY BRANCH OFFICES**

Branch office	Number of		
	Enumerators	Supervisors	Vehicles
Mekele	102	25	9
Asayita	32	6	3
Gondar	72	17	7
Bahir Dar	121	24	8
Dessie	102	25	7
Debre Birhan	67	18	8
Nazreth	55	15	9
Ambo	66	14	7
Nekemte	76	18	7
Jima	93	22	7
Goba	36	9	6
Asebe Teferi	46	11	5
Jijiga	22	5	3
Asosa	49	10	4
Awasa	171	40	12
Mizan Teferi	65	16	6
Arba Minch	119	28	8
Hosana	97	24	7
Gambela	32	7	4
Harar	51	13	4
Addis Ababa	31	9	7
Dire Dawa	53	10	5
Total	1558	366	143

6. Method of Data Collection

In the 2000/2001 AgSS data on area and production were recorded on questionnaires using both subjective and objective enumeration methods. Information on agricultural practices (application of pesticides and use of irrigation) were collected subjectively by interviewing the holders and data on area under crops, yield, application of fertilizers and use of seeds were collected by performing objective measurements in each sampled household.

The objective measurement procedures for area measurement were carried out for the twenty-five selected agricultural households from each sampled EA. This required that all separate fields by land area utilization be physically measured using compass and measuring tape. In addition, for all fields under temporary crops of each holder of the last fifteen (11th-25th) sampled households, each was classified by type of crop and for selected major crops, a field was randomly selected for each crop for crop cutting to be performed. Crop cutting procedures consist of demarcation of a sixteen square meter plot randomly located in the selected field for which the crop in the field is to be harvested.

Following the field enumerator's harvest of the crop-cutting plot and threshing, the crop is stored in bags with identification information (i.e. name of the crop, holder's number, and parcel and field numbers). The crop placed in the bag is weighed immediately (green weight) after threshing, and weighed again after two weeks of drying to simulate normal holder

harvesting and drying practices. The green and dry weights are recorded on the respective forms.

7. Data Processing

7.1 Editing, Coding and Verification

In order to insure the quality of the collected survey data an editing, coding and verification instruction manual was prepared and printed. Then 23 editors-coders and 22 verifiers were trained for two days in the editing, coding and verification operation using the aforementioned manual as a reference and teaching aid. The completed questionnaires were edited, coded and later verified on a 100% basis before the questionnaires were passed over to the data entry unit. The editing, coding and verification exercise of all questionnaires was completed in about 30 days.

7.2 Data Entry, Cleaning and Tabulation

Before starting data entry, professional staff of Agricultural Statistics Department prepared edit specifications for use on personal computers utilizing the Integrated Microcomputer Processing System (IMPS) software for data consistency checking purposes. The data on the coded questionnaires were then entered into personal computers using IMPS software. The data were then checked and cleaned using the edit specifications prepared earlier for this purpose. The data entry operation involved about 31 data encoders and it took 28 days to complete the job. Finally, tabulation was done on personal computers to produce results as indicated in the tabulation plan.

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PART III

SUMMARY OF THE SURVEY RESULTS

1. Area and Production

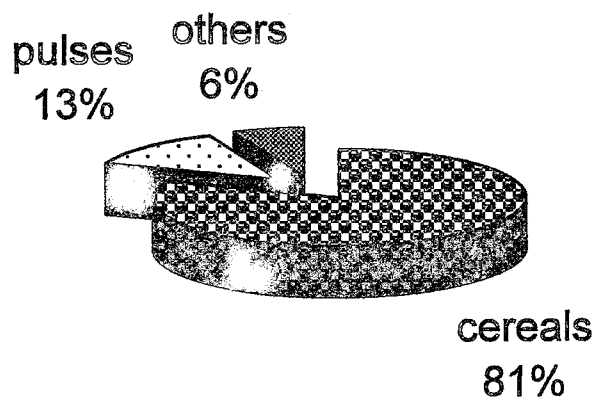
The results for area , production and yield of major crops (temporary or annual) are presented in this part of the report. The estimates for the major twenty crops exclude cash crops (coffee, chat, etc.), fruits, vegetables and root crops. Consequently, the total area under major temporary crops is estimated to be more than 9 million hectares (see Table C) at country level for the Meher season of 2000/2001 (1993 E.C).

Out of the total crop area, cereals accounted for about 7.64 million hectares (80.80%), while pulses and other crops (nueg, linseed, rapeseed, ground nuts, sunflower, sesame and fenugreek) accounted for about 1.23 million hectares (13.10%) and 0.57 million hectares (6.10%), respectively. Looking at specific crops, the largest area, or about 2.2 million hectares, is reported for Teff followed by maize and sorghum. For details refer to Table 1.

Table C Summary Estimates of Area, Production and Yield of Major Crops for the Year 2000/2001 (1993 E.C)

Crop type	Area in million hectares		Production in Million quintals		Yield
	number	Percent	Number	Percent	qt / hectare
Cereals	7.64	80.80	92.96	88.00	12.17
Pulses	1.23	13.10	10.74	10.00	8.70
Other crops	0.57	6.10	2.46	2.00	4.28
Total	9.44	100.00	106.16	100.00	-

**Fig.1 Estimates of Area Under Major Crops
for Private Peasant Holdings:
National 2000/2001 (1993 E.C)**



**Fig. 2 Estimates of Production for Major Crops
for Private Peasant Holdings:
National 2000/2001 (1993 E.C)**

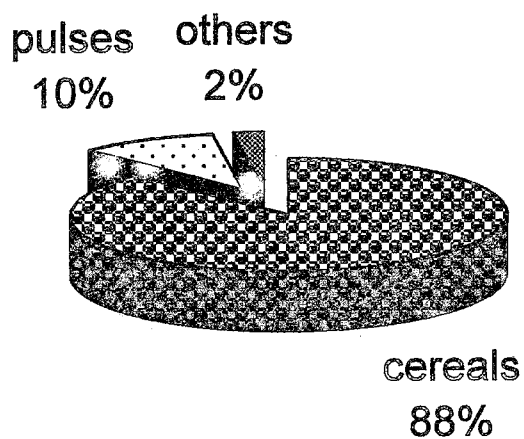


Table 1. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

National

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	7,636.65	80.85	92,960.34	87.57	12.17
Teff	2,182.53	23.11	17,369.24	16.36	7.96
Barley	874.01	9.25	9,454.25	8.91	10.82
Wheat	1,139.72	12.07	15,711.69	14.80	13.79
Maize	1,719.73	18.21	31,384.53	29.56	18.25
Sorghum	1,332.89	14.11	15,382.81	14.49	11.54
Millet	346.78	3.67	3,161.66	2.98	9.12
Oats	40.98	.43	496.16	.47	12.11
Pulses	1,233.94	13.06	10,736.14	10.11	8.70
Horse Beans	426.24	4.51	4,528.41	4.27	10.62
Field Peas	204.76	2.17	1,413.65	1.33	6.90
Haricot Beans	186.76	1.98	1,489.64	1.40	7.98
Chick Peas	211.91	2.24	1,757.34	1.66	8.29
Lentils	90.21	.96	552.91	.52	6.13
Vetch	114.06	1.21	994.19	.94	8.72
Others	574.89	6.09	2,463.37	2.32	4.28
Neug	335.66	3.55	1,189.88	1.12	3.54
Linseed	130.52	1.38	640.52	.60	4.91
Rapeseed	24.99	.26	147.36	.14	5.90
Ground Nuts	17.20	.18	152.10	.14	8.84
Sunflower	10.63	.11	64.66	.06	6.08
Sesame	42.37	.45	188.78	.18	4.46
Fenugreek	13.52	.14	80.08	.08	5.92
All Crops	9,445.48	100.00	106,159.85	100.00	-

The total production estimate at country level is about 106.16 million quintals, of which cereals accounted for 92.96 million quintals, pulses accounted for 10.74 million quintals, and other crops (mentioned above) totaled to 2.46 million quintals. (see Table C).

The survey results also indicate that the yield of cereals was 12.17 quintals per hectare, the yield of pulses was 8.70 quintals per hectare and the yield of other crops (mentioned above) was 4.28 quintals per hectare. In Table 1 it is also shown that the highest yield is reported for maize, which was 18.25 quintals per hectare, and the lowest is for nueg at 3.54 quintals per hectare.

As shown in Table 2, the total area cultivated and the total production have increased by 14.95% and 18.28% respectively compared to last crop season, i.e. 1999/2000

Comparing the AgSS estimates of area and production at the regional level, the data in Table 3 illustrates the existence of variation in yield by region.

Table 2. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings in Ethiopia (Meher Season) 1999/2000 (1992 E.C) and 2000/2001 (1993 E.C)

CROP	TOTAL AREA ('000 HA)			TOTAL PRODUCTION ('000 QT)			YIELD (QT/HA)		
	1999/2000 (1992 E.C)	2000/2001 (1993 E.C)	% CHANGE	1999/2000 (1992 E.C)	2000/2001 (1993 E.C)	% CHANGE	1999/2000 (1992 E.C)	2000/2001 (1993 E.C)	% CHANGE
<u>CEREALS</u>	6,747.47	7,636.65	13.18	77,412.63	92,960.34	20.08	11.47	12.17	6.10
TEFF	2,123.47	2,182.53	2.78	17,175.62	17,369.24	1.13	8.09	7.96	-1.61
BARLEY	794.10	874.01	10.06	7,419.28	9,454.25	27.43	9.34	10.82	15.85
WHEAT	1,025.31	1,139.72	11.16	12,126.25	15,711.69	29.57	11.83	13.79	16.57
MAIZE	1,407.27	1,719.73	22.20	25,254.71	31,384.53	24.27	17.95	18.25	1.67
SORGHUM	995.41	1,332.89	33.90	11,811.43	15,382.81	30.24	11.87	11.54	-2.78
MILLET	360.23	346.78	-3.73	3,195.09	3,161.66	-1.05	8.87	9.12	2.82
OATS	41.67	40.98	-1.66	430.25	496.16	15.32	10.33	12.11	17.23
<u>PULSES</u>	1,044.97	1,233.94	18.08	9,594.49	10,736.14	11.90	9.18	8.7	-5.23
HORSE BEANS	359.15	426.24	18.68	3,886.82	4,528.41	16.51	10.82	10.62	-1.85
FIELD PEAS	152.20	204.76	34.53	1,159.98	1,413.65	21.87	7.62	6.9	-9.45
HARICOT BEANS	166.04	186.76	12.48	1,328.88	1,489.64	12.10	8	7.98	-0.25
CHICK PEAS	184.79	211.91	14.68	1,646.27	1,757.34	6.75	8.91	8.29	-6.96
LENTILS	72.22	90.21	24.91	497.71	552.91	11.09	6.89	6.13	-11.03
VETCH	110.58	114.06	3.15	1,074.83	994.19	-7.50	9.72	8.72	-10.29
<u>OTHERS</u>	424.26	574.89	35.50	1,902.84	2,463.37	29.46	4.49	4.28	-4.68
NEUG	256.53	335.66	30.85	1,021.70	1,189.88	16.46	3.98	3.54	-11.06
LINSEED	74.12	130.52	76.09	321.38	640.52	99.30	4.34	4.91	13.13
RAPESEED	20.38	24.99	22.62	139.05	147.36	5.98	6.82	5.9	-13.49
GROUNDNUTS	13.55	17.20	26.94	119.29	152.10	27.50	8.8	8.84	0.45
SUNFLOWER	5.23	10.63	103.25	37.15	64.66	74.05	7.1	6.08	-14.37
SESAME	38.19	42.37	10.95	156.34	188.78	20.75	4.09	4.46	9.05
FENUGREEK	16.26	13.52	-16.85	107.93	80.08	-25.80	6.64	5.92	-10.84
ALL CROPS	8,216.70	9,445.48	14.95	88,909.96	106,159.85	19.40	-	-	-

In Tigray Region, 634.69 thousand hectares of land have been allotted to grow the twenty major crops by private peasant holders in 2000/2001, an increase of 13.16 from the previous year. Production of the twenty major crops was the same as that of the previous year. The 2000/2001 estimate of total major crop production of Tigray Region accounted for 5.87% of the total national crop production. The land area under the twenty major crops constitutes 6.72 % of the total land area under similar crops at country level.

In Afar Region 29.27 thousand hectares of land was cultivated in order to grow the twenty major crops by private peasant holders in 2000/2001. The area cultivated showed an increase of 54.21% from the previous year. In this region, production of the twenty major crops was down by 69.74% compared to 1999/2000 and accounted for only 0.07% of the total crop production at country level.

Amhara Region is the second largest in both area planted and production in 2000/2001 with 3.46 million hectares of land cultivated for growing the twenty major crops by private peasant holders. This indicates an increase of the 12.52% from the previous year. This area accounted for 36.62% of the national total area under those major crops. Production of the twenty major crops was up by 14.69% from the previous year and this production accounted for 31.12% of the crop production at country level.

Oromiya Region is the largest in both area planted and production in 2000/2001 and 3.98 million hectares of land was cultivated to grow the twenty major crops by private peasant holders. This shows an increase of

Fig. 3 Estimates of Area and Production of Major Crops by Region for Private Peasant Holdings 2000/2001 (1993 E.C)

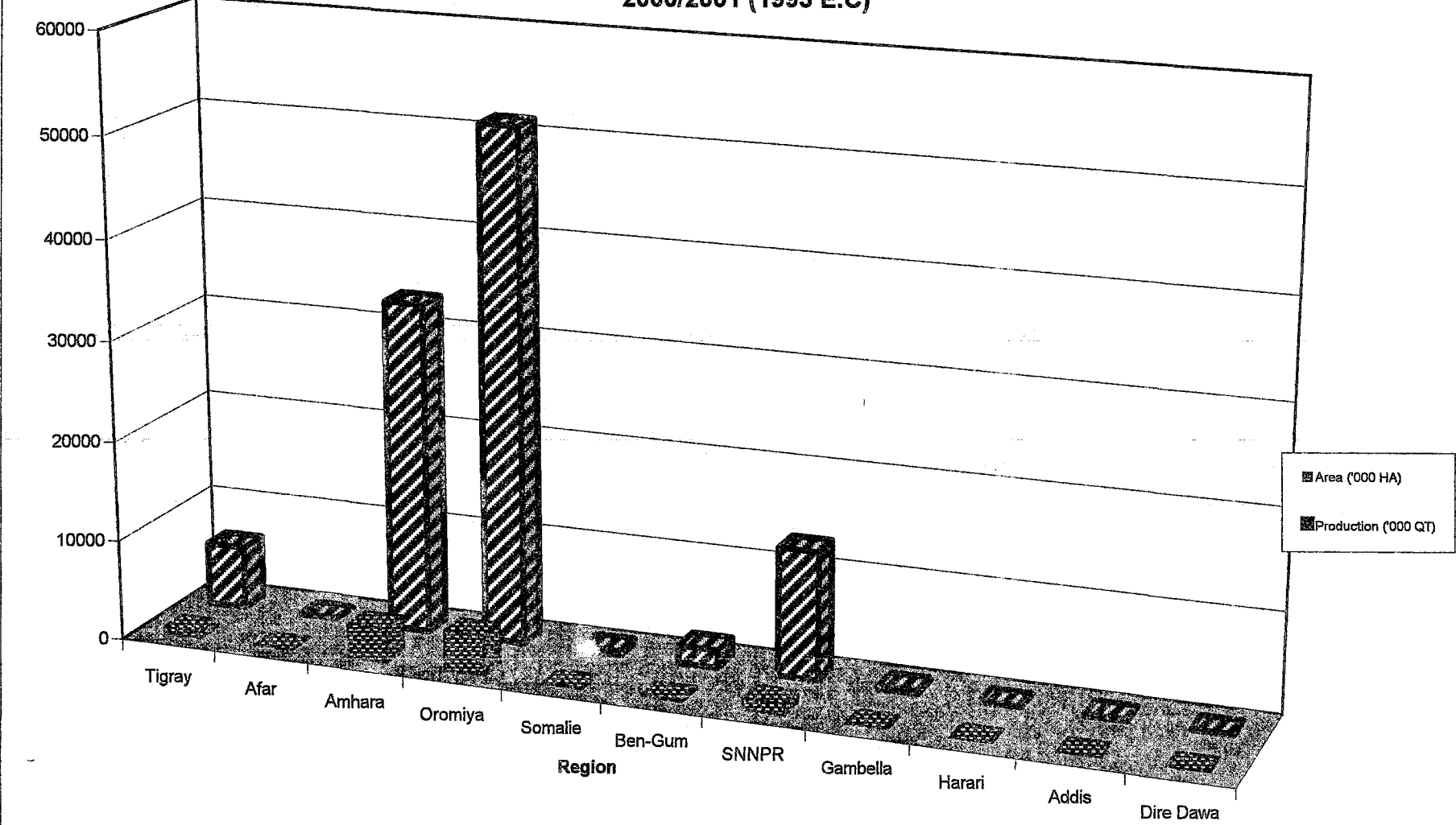


Table 3. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings in Ethiopia by Region (Meher Season) 1999/2000 (1992 E.C) and 2000/2001 (1993 E.C)

REGION	TOTAL AREA ('000 HA)			TOTAL PRODUCTION ('000 QT)			YIELD (QT/HA)		
	1999/2000 (1992 E.C)	2000/2001 (1993 E.C)	% CHANGE	1999/2000 (1992 E.C)	2000/2001 (1993 E.C)	% CHANGE	1999/2000 (1992 E.C)	2000/2001 (1993 E.C)	% CHANGE
TIGRAY	560.89	634.69	13.16	6,227.28	6,232.29	0.08	11.1	9.82	-11.53
AFAR	18.98	29.27	54.21	245.93	74.43	-69.74	12.96	2.54	-80.40
AMHARA	3,074.32	3,459.37	12.52	28,807.12	33,038.45	14.69	9.37	9.55	1.92
OROMIYA	3,613.21	3,975.56	10.03	43,719.76	51,265.76	17.26	12.1	12.9	6.61
SOMALIE	47.58	59.73	25.54	225.21	452.74	101.03	4.73	7.58	60.25
BENISHANGUL-GUMUZ	172.68	172.42	-0.15	1,845.52	1,761.20	-4.57	10.69	10.21	-4.49
S.N.N.P.R	695.54	1,072.81	54.24	7,387.57	12,749.12	72.58	10.62	11.88	11.86
GAMBELLA	12.79	14.24	11.34	249.07	306.26	22.96	19.47	21.51	10.48
HARARI	6.57	7.68	16.89	58.14	57.77	-0.64	8.85	7.52	-15.03
ADDIS ABABA	8.03	11.68	45.45	82.99	147.87	78.18	10.33	12.66	22.56
DIRE DAWA	6.11	8.02	31.26	61.37	73.96	20.51	10.04	9.22	-8.17
ALL REGIONS	8,216.70	9,445.48	14.95	88,909.96	106,159.85	19.40	-	-	-

10.03% from the previous year. This area comprised 42.09% of the total crop area at country level and accounted for 48.29% of the total crop production, at country level. In this region, the production of the twenty major crops was up by 17.26% compared to that of 1999/2000 year estimate.

Somalie and Gambella Regions both showed an increase of 25.54% and 11.34% in planted area and 101.03% and 22.96% in production, respectively, while Benishangul-Gumuz Region showed a decrease of 0.15% and 4.57% in planted area and production, respectively compared to the previous year.

SNNP Region cultivated 1072.81 thousand hectares of land and is the third largest major crop growing region in the country, accounting for 11.36% of the total area planted at country level. Production in the same region increased by 72.58% compared with the previous year.

The three remaining regions of Harari, Addis Ababa, and Dire Dawa experienced similar increase in planted area which amounts to 16.89%, 45.45%, and 31.26%, respectively compared with the 1999/2000 Meher season crop production estimate. Production was down by 0.64% in Harari and up by 78.18% and 20.51% in Addis Ababa and Dire Dawa, respectively, compared with that of the previous year. Detailed estimates at regional as well as zonal levels are given in Tables 4 through 14.

Note

1. Some estimates in all reporting levels are excluded due to high coefficients of variations. Nevertheless, these estimates are incorporated in the total. Hence, the sum of the specific estimates may not be equal to the total estimates.
2. Institutions or individuals are advised to use those estimates with 30-50% coefficient of variation (CV) with caution.
3. For those items in the tables where "-" appears, it implies that no data was obtained from the sample units from which an estimate could be made.

Table 1. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

National

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	7,636.65	80.85	92,960.34	87.57	12.17
Teff	2,182.53	23.11	17,369.24	16.36	7.96
Barley	874.01	9.25	9,454.25	8.91	10.82
Wheat	1,139.72	12.07	15,711.69	14.80	13.79
Maize	1,719.73	18.21	31,384.53	29.56	18.25
Sorghum	1,332.89	14.11	15,382.81	14.49	11.54
Millet	346.78	3.67	3,161.66	2.98	9.12
Oats	40.98	.43	496.16	.47	12.11
Pulses	1,233.94	13.06	10,736.14	10.11	8.70
Horse Beans	426.24	4.51	4,528.41	4.27	10.62
Field Peas	204.76	2.17	1,413.65	1.33	6.90
Haricot Beans	186.76	1.98	1,489.64	1.40	7.98
Chick Peas	211.91	2.24	1,757.34	1.66	8.29
Lentils	90.21	.96	552.91	.52	6.13
Vetch	114.06	1.21	994.19	.94	8.72
Others	574.89	6.09	2,463.37	2.32	4.28
Neug	335.66	3.55	1,189.88	1.12	3.54
Linseed	130.52	1.38	640.52	.60	4.91
Rapeseed	24.99	.26	147.36	.14	5.90
Ground Nuts	17.20	.18	152.10	.14	8.84
Sunflower	10.63	.11	64.66	.06	6.08
Sesame	42.37	.45	188.78	.18	4.46
Fenugreek	13.52	.14	80.08	.08	5.92
All Crops	9,445.48	100.00	106,159.85	100.00	-

Table 4. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Tigray

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	535.19	84.32	5,494.48	88.16	10.27
Teff	141.01	22.22	1,048.01	16.82	7.43
Barley	65.36	10.30	572.53	9.19	8.76
Wheat	73.32	11.55	681.80	10.94	9.30
Maize	55.68	8.77	860.59	13.81	15.46
Sorghum	134.36	21.17	1,710.80	27.45	12.73
Millet	65.09	10.26	618.11	9.92	9.50
Oats	*	*	*	*	*
Pulses	60.78	9.58	575.10	9.23	9.46
Horse Beans	18.83	2.97	243.89	3.91	12.95
Field Peas	5.49	.86	47.71	.77	8.69
Haricot Beans	2.64	.42	11.67	.19	4.42
Chick Peas	17.09	2.69	140.11	2.25	8.20
Lentils	6.70	1.06	36.87	.59	5.50
Vetch	10.03	1.58	94.86	1.52	9.46
Others	38.73	6.10	162.71	2.61	4.20
Neug	12.01	1.89	59.82	.96	4.98
Linseed	11.39	1.79	48.50	.78	4.26
Rapeseed	*	*	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	15.02	2.37	*	*	*
Fenugreek	.18	.03	*	*	*
All Crops	634.69	100.00	6,232.29	100.00	-

Table 4.1 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

West Tigray

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	170.21	84.15	1,953.63	91.42	11.48
Teff	36.44	18.02	262.16	12.27	7.19
Barley	*	*	*	*	*
Wheat	*	*	-	-	-
Maize	26.55	13.13	460.66	21.56	17.35
Sorghum	60.18	29.75	774.47	36.24	12.87
Millet	45.93	22.71	444.21	20.79	9.67
Oats	-	-	-	-	-
Pulses	7.64	3.78	73.79	3.45	9.66
Horse Beans	2.92	1.44	31.17	1.46	10.67
Field Peas	*	*	*	*	*
Haricot Beans	*	*	*	*	*
Chick Peas	4.38	2.17	40.07	1.88	9.15
Lentils	*	*	-	-	-
Vetch	-	-	-	-	-
Others	24.42	12.07	109.60	5.13	4.49
Neug	7.64	3.78	43.90	2.05	5.75
Linseed	2.32	1.15	*	*	*
Rapeseed	*	*	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	*	*	-	-	-
Sesame	14.44	7.14	*	*	*
Fenugreek	-	-	-	-	-
All Crops	202.27	100.00	2,137.02	100.00	-

Table 4.2 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Central Tigray

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	158.25	86.58	1,573.95	90.24	9.95
Teff	52.60	28.78	393.45	22.56	7.48
Barley	12.34	6.75	96.06	5.51	7.78
Wheat	16.12	8.82	131.97	7.57	8.19
Maize	17.98	9.84	255.37	14.64	14.20
Sorghum	42.95	23.50	545.94	31.30	12.71
Millet	16.26	8.90	151.15	8.67	9.30
Oats	-	-	-	-	-
Pulses	16.37	8.96	141.01	8.08	8.61
Horse Beans	6.88	3.76	76.87	4.41	11.17
Field Peas	.36	.20	*	*	*
Haricot Beans	1.40	.77	*	*	*
Chick Peas	4.26	2.33	30.47	1.75	7.15
Lentils	1.69	.92	9.58	.55	5.67
Vetch	1.77	.97	15.96	.92	9.02
Others	8.16	4.46	29.23	1.68	3.58
Neug	4.11	2.25	15.60	.89	3.80
Linseed	3.42	1.87	12.35	.71	3.61
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	182.78	100.00	1,744.19	100.00	-

Table 4.3 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

East Tigray

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	65.29	77.78	654.18	79.68	10.02
Teff	9.72	11.58	79.89	9.73	8.22
Barley	26.11	31.11	269.09	32.77	10.31
Wheat	23.50	28.00	238.35	29.03	10.14
Maize	1.70	2.03	27.43	3.34	16.14
Sorghum	1.80	2.14	18.97	2.31	10.54
Millet	2.20	2.62	18.46	2.25	8.39
Oats	*	*	*	*	*
Pulses	16.09	19.17	153.30	18.67	9.53
Horse Beans	2.70	3.22	39.30	4.79	14.56
Field Peas	1.67	1.99	13.74	1.67	8.23
Haricot Beans	*	*	-	-	-
Chick Peas	5.20	6.19	39.45	4.80	7.59
Lentils	1.04	1.24	7.01	.85	6.74
Vetch	5.43	6.47	53.80	6.55	9.91
Others	2.56	3.05	*	*	*
Neug	*	*	*	*	*
Linseed	2.44	2.91	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	*	*	-
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	83.94	100.00	821.06	100.00	-

Table 4.4 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

South Tigray

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	141.43	85.35	1,312.72	85.80	9.28
Teff	42.25	25.50	312.51	20.43	7.40
Barley	25.82	15.58	195.24	12.76	7.56
Wheat	33.68	20.33	311.48	20.36	9.25
Maize	9.45	5.70	117.13	7.66	12.39
Sorghum	29.42	17.75	371.42	24.28	12.62
Millet	*	*	*	*	*
Oats	*	*	*	*	*
Pulses	20.68	12.48	207.00	13.53	10.01
Horse Beans	6.32	3.81	96.55	6.31	15.28
Field Peas	3.28	1.98	30.61	2.00	9.33
Haricot Beans	*	*	*	*	*
Chick Peas	3.24	1.96	30.13	1.97	9.30
Lentils	3.95	2.38	20.27	1.32	5.13
Vetch	2.84	1.71	25.10	1.64	8.84
Others	3.59	2.17	10.29	.67	2.87
Neug	*	*	*	*	*
Linseed	3.21	1.94	9.17	.60	2.86
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	165.70	100.00	1,530.01	100.00	-

Table 5. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Afar

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	26.85	91.73	74.43	100.00	2.77
Teff	8.26	28.22	-	-	-
Barley	*	*	-	-	-
Wheat	*	*	-	-	-
Maize	6.75	23.06	72.95	98.01	10.81
Sorghum	11.25	38.44	*	*	*
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.54	5.26	-	-	-
Horse Beans	-	-	-	-	-
Field Peas	*	*	-	-	-
Haricot Beans	*	*	-	-	-
Chick Peas	1.17	4.00	-	-	-
Lentils	*	*	-	-	-
Vetch	-	-	-	-	-
Others	.88	3.01	-	-	-
Neug	-	-	-	-	-
Linseed	*	*	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	.49	1.67	-	-	-
Sesame	.36	1.23	-	-	-
Fenugreek	*	*	-	-	-
All Crops	29.27	100.00	74.43	100.00	-

Table 5.1 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Zone 1

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	3.80	99.74	70.34	100.00	18.51
Teff	*	*	-	-	-
Barley	-	-	-	-	-
Wheat	-	-	-	-	-
Maize	3.65	95.80	68.86	97.90	18.87
Sorghum	*	*	*	*	*
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	-	-	-	-	-
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	-	-	-	-	-
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	*	*	-	-	-
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	*	*	-	-	-
Fenugreek	-	-	-	-	-
All Crops	3.81	100.00	70.34	100.00	-

Table 5.2 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Zone 3

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	23.05	90.53	*	*	*
Teff	8.25	32.40	-	-	-
Barley	*	*	-	-	-
Wheat	*	*	-	-	-
Maize	3.10	12.18	*	*	*
Sorghum	11.11	43.64	-	-	-
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.54	6.05	-	-	-
Horse Beans	-	-	-	-	-
Field Peas	*	*	-	-	-
Haricot Beans	*	*	-	-	-
Chick Peas	1.17	4.60	-	-	-
Lentils	*	*	-	-	-
Vetch	-	-	-	-	-
Others	.87	3.42	-	-	-
Neug	-	-	-	-	-
Linseed	*	*	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	.49	1.92	-	-	-
Sesame	.36	1.41	-	-	-
Fenugreek	*	*	-	-	-
All Crops	25.46	100.00	*	*	-

Table 6. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holding 2000/2001 (1993 E.C.)

Amhara

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	2,644.91	76.46	27,513.86	83.28	10.40
Teff	949.35	27.44	7,685.36	23.26	8.10
Barley	287.87	8.32	2,488.52	7.53	8.64
Wheat	308.30	8.91	3,225.03	9.76	10.46
Maize	377.76	10.92	6,488.83	19.64	17.18
Sorghum	520.87	15.06	5,707.91	17.28	10.96
Millet	187.85	5.43	1,789.48	5.42	9.53
Oats	12.91	.37	128.73	.39	9.97
Pulses	560.09	16.19	4,513.33	13.66	8.06
Horse Beans	182.60	5.28	1,896.19	5.74	10.38
Field Peas	90.24	2.61	624.75	1.89	6.92
Haricot Beans	43.28	1.25	289.73	.88	6.69
Chick Peas	121.14	3.50	835.55	2.53	6.90
Lentils	56.27	1.63	365.49	1.11	6.50
Vetch	66.57	1.92	501.63	1.52	7.54
Others	254.37	7.35	1,011.26	3.06	3.98
Neug	186.02	5.38	695.15	2.10	3.74
Linseed	30.47	.88	86.67	.26	2.84
Rapeseed	7.98	.23	47.71	.14	5.98
Ground Nuts	*	*	*	*	*
Sunflower	9.18	.27	59.14	.18	6.44
Sesame	13.23	.38	75.39	.23	5.70
Fenugreek	7.42	.21	47.11	.14	6.35
All Crops	3,459.37	100.00	33,038.45	100.00	-

Table 6.1 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

North Gonder

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	427.99	76.16	3,972.99	83.85	9.28
Teff	116.92	20.80	874.00	18.45	7.48
Barley	37.68	6.70	274.81	5.80	7.29
Wheat	24.65	4.39	168.79	3.56	6.85
Maize	44.77	7.97	607.26	12.82	13.56
Sorghum	154.61	27.51	1,583.51	33.42	10.24
Millet	48.40	8.61	458.62	9.68	9.48
Oats	.95	.17	*	*	*
Pulses	73.16	13.02	528.51	11.15	7.22
Horse Beans	26.13	4.65	204.40	4.31	7.82
Field Peas	12.23	2.18	83.39	1.76	6.82
Haricot Beans	*	*	*	*	*
Chick Peas	26.00	4.63	196.30	4.14	7.55
Lentils	*	*	*	*	*
Vetch	*	*	*	*	*
Others	60.84	10.83	236.74	5.00	3.89
Neug	45.94	8.17	182.96	3.86	3.98
Linseed	5.71	1.02	20.17	.43	3.53
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	1.58	.28	*	*	*
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	561.99	100.00	4,738.23	100.00	-

Table 6.2 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

South Gonder

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	323.93	73.16	2,454.17	76.94	7.58
Teff	117.91	26.63	702.39	22.02	5.96
Barley	54.79	12.38	404.12	12.67	7.38
Wheat	35.86	8.10	317.38	9.95	8.85
Maize	40.58	9.17	393.45	12.34	9.70
Sorghum	32.01	7.23	252.62	7.92	7.89
Millet	42.61	9.62	383.68	12.03	9.00
Oats	*	*	*	*	*
Pulses	82.22	18.57	610.28	19.13	7.42
Horse Beans	26.21	5.92	248.06	7.78	9.46
Field Peas	10.62	2.40	72.58	2.28	6.83
Haricot Beans	*	*	*	*	*
Chick Peas	24.49	5.53	155.90	4.89	6.37
Lentils	5.57	1.26	27.67	.87	4.97
Vetch	8.08	1.82	76.82	2.41	9.51
Others	36.60	8.27	125.12	3.92	3.42
Neug	27.54	6.22	100.82	3.16	3.66
Linseed	5.72	1.29	15.33	.48	2.68
Rapeseed	1.24	.28	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	1.27	.29	*	*	*
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	442.74	100.00	3,189.57	100.00	-

Table 6.3 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

North Wolo

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	175.78	75.66	1,755.69	77.28	9.99
Teff	52.49	22.59	394.03	17.34	7.51
Barley	33.95	14.61	292.34	12.87	8.61
Wheat	33.77	14.53	312.50	13.76	9.25
Maize	8.08	3.48	121.24	5.34	15.00
Sorghum	44.78	19.27	609.78	26.84	13.62
Millet	.77	.33	9.68	.43	12.57
Oats	1.94	.83	16.11	.71	8.30
Pulses	51.27	22.07	483.65	21.29	9.43
Horse Beans	14.45	6.22	165.28	7.28	11.44
Field Peas	11.07	4.76	95.77	4.22	8.65
Haricot Beans	.20	.09	*	*	*
Chick Peas	8.81	3.79	70.56	3.11	8.01
Lentils	11.79	5.07	97.50	4.29	8.27
Vetch	4.94	2.13	53.25	2.34	10.78
Others	5.30	2.28	32.39	1.43	6.11
Neug	*	*	*	*	*
Linseed	2.59	1.11	8.39	.37	3.24
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	*	*	-	-	-
Fenugreek	1.35	.58	*	*	*
All Crops	232.34	100.00	2,271.73	100.00	-

Table 6.4 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

South Wolo

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	263.63	73.49	2,622.10	74.38	9.95
Teff	74.52	20.77	673.59	19.11	9.04
Barley	25.13	7.01	239.37	6.79	9.53
Wheat	44.72	12.47	445.55	12.64	9.96
Maize	16.17	4.51	166.32	4.72	10.29
Sorghum	90.58	25.25	971.63	27.56	10.73
Millet	*	*	*	*	*
Oats	8.58	2.39	*	*	*
Pulses	86.81	24.20	862.12	24.45	9.93
Horse Beans	31.17	8.69	379.52	10.77	12.18
Field Peas	15.53	4.33	125.06	3.55	8.05
Haricot Beans	5.78	1.61	36.87	1.05	6.38
Chick Peas	10.17	2.84	105.33	2.99	10.36
Lentils	9.81	2.73	57.41	1.63	5.85
Vetch	14.35	4.00	157.93	4.48	11.01
Others	8.27	2.31	41.22	1.17	4.98
Neug	2.71	.76	8.65	.25	3.19
Linseed	1.92	.54	3.43	.10	1.79
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	358.71	100.00	3,525.43	100.00	-

Table 6.5 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

North Shewa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	356.73	78.00	3,595.40	82.80	10.08
Teff	154.08	33.69	1,407.60	32.42	9.14
Barley	38.95	8.52	422.80	9.74	10.85
Wheat	75.19	16.44	741.66	17.08	9.86
Maize	11.54	2.52	152.94	3.52	13.25
Sorghum	76.67	16.76	868.79	20.01	11.33
Millet	*	*	-	-	-
Oats	*	*	*	*	*
Pulses	89.24	19.51	682.34	15.71	7.65
Horse Beans	29.51	6.45	307.86	7.09	10.43
Field Peas	7.31	1.60	46.66	1.07	6.38
Haricot Beans	2.30	.50	9.73	.22	4.23
Chick Peas	22.34	4.88	165.59	3.81	7.41
Lentils	20.65	4.52	124.79	2.87	6.04
Vetch	7.13	1.56	*	*	*
Others	11.39	2.49	64.58	1.49	5.67
Neug	1.02	.22	3.44	.08	3.37
Linseed	2.86	.63	4.26	.10	1.49
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	3.73	.82	*	*	*
Sesame	*	*	*	*	*
Fenugreek	.82	.18	3.36	.08	4.10
All Crops	457.36	100.00	4,342.32	100.00	-

Table 6.6 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

East Gojam

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	401.34	77.69	4,687.30	84.78	11.68
Teff	197.12	38.16	1,786.52	32.31	9.06
Barley	49.82	9.64	502.83	9.09	10.09
Wheat	73.44	14.22	1,045.62	18.91	14.24
Maize	54.60	10.57	919.07	16.62	16.83
Sorghum	25.83	5.00	427.29	7.73	16.54
Millet	*	*	*	*	*
Oats	-	-	-	-	-
Pulses	93.21	18.04	762.16	13.79	8.18
Horse Beans	26.11	5.05	308.31	5.58	11.81
Field Peas	11.78	2.28	79.96	1.45	6.79
Haricot Beans	*	*	*	*	*
Chick Peas	18.42	3.57	91.80	1.66	4.98
Lentils	*	*	*	*	*
Vetch	23.33	4.52	150.28	2.72	6.44
Others	22.04	4.27	79.34	1.44	3.60
Neug	15.75	3.05	54.79	.99	3.48
Linseed	4.09	.79	15.12	.27	3.70
Rapeseed	1.61	.31	7.07	.13	4.39
Ground Nuts	-	-	-	-	-
Sunflower	*	*	-	-	-
Sesame	*	*	*	*	*
Fenugreek	.51	.10	*	*	*
All Crops	516.59	100.00	5,528.79	100.00	-

Table 6.7 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

West Gojam

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	361.77	75.84	4,996.75	87.96	13.81
Teff	121.75	25.52	858.48	15.11	7.05
Barley	18.34	3.84	130.16	2.29	7.10
Wheat	8.53	1.79	92.68	1.63	10.87
Maize	146.47	30.71	3,155.23	55.54	21.54
Sorghum	*	*	*	*	*
Millet	53.56	11.23	614.01	10.81	11.46
Oats	*	*	*	*	*
Pulses	55.72	11.68	401.52	7.07	7.21
Horse Beans	18.29	3.83	186.97	3.29	10.22
Field Peas	15.70	3.29	88.80	1.56	5.66
Haricot Beans	*	*	*	*	*
Chick Peas	8.76	1.84	37.58	.66	4.29
Lentils	*	*	*	*	*
Vetch	3.63	.76	14.69	.26	4.05
Others	59.50	12.47	282.42	4.97	4.75
Neug	52.15	10.93	244.18	4.30	4.68
Linseed	4.53	.95	12.49	.22	2.76
Rapeseed	2.53	.53	24.76	.44	9.79
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	-	-	-	-	-
Fenugreek	*	*	-	-	-
All Crops	477.00	100.00	5,680.69	100.00	-

Table 6.8 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Waghamera

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	68.80	74.61	417.79	73.89	6.07
Teff	20.64	22.38	115.96	20.51	5.62
Barley	12.98	14.08	94.12	16.65	7.25
Wheat	7.72	8.37	54.61	9.66	7.07
Maize	1.53	1.66	7.89	1.40	5.16
Sorghum	25.73	27.90	143.98	25.46	5.60
Millet	.20	.22	*	*	*
Oats	-	-	-	-	-
Pulses	18.91	20.51	126.23	22.32	6.68
Horse Beans	7.78	8.44	74.23	13.13	9.54
Field Peas	2.92	3.17	17.72	3.13	6.07
Haricot Beans	3.71	4.02	8.78	1.55	2.37
Chick Peas	.89	.97	3.58	.63	4.02
Lentils	3.60	3.90	21.93	3.88	6.09
Vetch	*	*	-	-	-
Others	4.50	4.88	21.41	3.79	4.76
Neug	.57	.62	1.87	.33	3.28
Linseed	1.42	1.54	4.83	.85	3.40
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	.97	1.05	6.05	1.07	6.24
Sesame	*	*	*	*	*
Fenugreek	.02	.02	*	*	*
All Crops	92.21	100.00	565.43	100.00	-

Table 6.9 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

AwI

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	198.08	79.67	2,199.70	93.75	11.11
Teff	82.61	33.23	*	*	*
Barley	15.65	6.29	123.92	5.28	7.92
Wheat	3.96	1.59	*	*	*
Maize	39.07	15.71	749.09	31.93	19.17
Sorghum	*	*	*	*	*
Millet	37.46	15.07	282.92	12.06	7.55
Oats	*	*	*	*	*
Pulses	6.84	2.75	33.99	1.45	4.97
Horse Beans	2.47	.99	15.33	.65	6.21
Field Peas	2.81	1.13	12.85	.55	4.57
Haricot Beans	-	-	-	-	-
Chick Peas	*	*	*	*	*
Lentils	*	*	-	-	-
Vetch	*	*	-	-	-
Others	43.71	17.58	112.62	4.80	2.58
Neug	39.69	15.96	96.69	4.12	2.44
Linseed	*	*	*	*	*
Rapeseed	1.06	.43	8.78	.37	8.28
Ground Nuts	*	*	*	*	*
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	248.62	100.00	2,346.32	100.00	-

Table 6.10 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Oromia Zone

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	66.87	93.12	811.98	95.53	12.14
Teff	11.30	15.74	79.30	9.33	7.02
Barley	.58	.81	4.03	.47	6.95
Wheat	*	*	*	*	*
Maize	14.94	20.80	216.35	25.45	14.48
Sorghum	39.05	54.38	502.98	59.18	12.88
Millet	*	*	*	*	*
Oats	*	*	*	*	*
Pulses	2.72	3.79	22.53	2.65	8.28
Horse Beans	*	*	*	*	*
Field Peas	*	*	*	*	*
Haricot Beans	1.15	1.60	9.46	1.11	8.23
Chick Peas	*	*	*	*	*
Lentils	.34	.47	1.79	.21	5.26
Vetch	*	*	-	-	-
Others	2.22	3.09	15.43	1.82	6.95
Neug	.10	.14	*	*	*
Linseed	.12	.17	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	1.74	2.42	13.89	1.63	7.98
Fenugreek	.01	.01	.01	*	1.00
All Crops	71.81	100.00	849.94	100.00	-

Table 7. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Oromia

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	3,300.21	83.01	45,784.52	89.31	13.87
Teff	887.25	22.32	7,280.59	14.20	8.21
Barley	397.64	10.00	5,132.46	10.01	12.91
Wheat	642.70	16.17	9,905.01	19.32	15.41
Maize	871.25	21.92	17,247.24	33.64	19.80
Sorghum	410.42	10.32	5,369.90	10.47	13.08
Millet	63.53	1.60	485.82	.95	7.65
Oats	27.41	.69	363.50	.71	13.26
Pulses	440.89	11.09	4,377.23	8.54	9.93
Horse Beans	171.50	4.31	1,972.42	3.85	11.50
Field Peas	66.23	1.67	513.78	1.00	7.76
Haricot Beans	77.17	1.94	654.61	1.28	8.48
Chick Peas	64.39	1.62	718.86	1.40	11.16
Lentils	26.24	.66	146.72	.29	5.59
Vetch	35.37	.89	370.83	.72	10.48
Others	234.47	5.90	1,104.01	2.15	4.71
Neug	111.14	2.80	351.34	.69	3.16
Linseed	86.71	2.18	499.77	.97	5.76
Rapeseed	14.72	.37	90.97	.18	6.18
Ground Nuts	*	*	*	*	*
Sunflower	.39	.01	*	*	*
Sesame	3.77	.09	17.42	.03	4.62
Fenugreek	5.51	.14	30.64	.06	5.56
All Crops	3,975.56	100.00	51,265.76	100.00	-

Table 7.1 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

West Welega

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	244.11	86.28	3,308.85	94.32	13.55
Teff	35.38	12.50	169.43	4.83	4.79
Barley	4.01	1.42	31.25	.89	7.79
Wheat	11.92	4.21	*	*	*
Maize	106.23	37.55	2,121.11	60.46	19.97
Sorghum	52.51	18.56	593.41	16.92	11.30
Millet	34.02	12.02	231.33	6.59	6.80
Oats	*	*	*	*	*
Pulses	24.89	8.80	163.07	4.65	6.55
Horse Beans	8.00	2.83	64.18	1.83	8.02
Field Peas	2.45	.87	9.00	.26	3.67
Haricot Beans	11.19	3.95	72.37	2.06	6.47
Chick Peas	*	*	*	*	*
Lentils	-	-	-	-	-
Vetch	*	*	*	*	*
Others	13.95	4.93	36.18	1.03	2.59
Neug	12.50	4.42	32.30	.92	2.58
Linseed	.25	.09	*	*	*
Rapeseed	1.00	.35	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	282.94	100.00	3,508.10	100.00	-

Table 7.2 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

East Welega

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	328.11	78.52	4,673.65	91.72	14.24
Teff	123.96	29.67	928.17	18.22	7.49
Barley	18.24	4.37	215.77	4.23	11.83
Wheat	24.19	5.79	350.82	6.88	14.50
Maize	113.08	27.06	2,647.30	51.95	23.41
Sorghum	27.84	6.66	387.39	7.60	13.91
Millet	20.71	4.96	144.19	2.83	6.96
Oats	*	*	-	-	-
Pulses	24.47	5.86	194.43	3.82	7.95
Horse Beans	14.22	3.40	139.39	2.74	9.80
Field Peas	6.54	1.57	40.44	.79	6.18
Haricot Beans	.46	.11	*	*	*
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	65.27	15.62	227.38	4.46	3.48
Neug	57.99	13.88	198.70	3.90	3.43
Linseed	2.69	.64	*	*	*
Rapeseed	1.99	.48	13.44	.26	6.75
Ground Nuts	-	-	-	-	-
Sunflower	*	*	-	-	-
Sesame	2.30	.55	*	*	*
Fenugreek	.26	.06	.86	.02	3.31
All Crops	417.85	100.00	5,095.46	100.00	-

Table 7.3 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Illubabor

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	149.80	91.39	2,232.59	96.43	14.90
Teff	44.05	26.87	312.89	13.51	7.10
Barley	2.57	1.57	17.72	.77	6.89
Wheat	2.08	1.27	19.84	.86	9.54
Maize	75.09	45.81	1,549.01	66.90	20.63
Sorghum	22.51	13.73	294.85	12.73	13.10
Millet	3.50	2.14	38.27	1.65	10.93
Oats	*	*	*	*	*
Pulses	11.46	6.99	76.07	3.29	6.64
Horse Beans	3.75	2.29	22.86	.99	6.10
Field Peas	3.10	1.89	18.81	.81	6.07
Haricot Beans	4.54	2.77	34.05	1.47	7.50
Chick Peas	*	*	*	*	*
Lentils	-	-	-	-	-
Vetch	*	*	*	*	*
Others	2.66	1.62	6.64	.29	2.50
Neug	2.13	1.30	5.04	.22	2.37
Linseed	.44	.27	1.28	.06	2.91
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	.04	.02	*	*	*
All Crops	163.92	100.00	2,315.31	100.00	-

Table 7.4 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Jimma

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	324.61	89.40	4,564.92	95.93	14.06
Teff	114.95	31.66	693.63	14.58	6.03
Barley	19.19	5.28	138.86	2.92	7.24
Wheat	24.23	6.67	246.33	5.18	10.17
Maize	119.05	32.79	2,862.02	60.14	24.04
Sorghum	41.59	11.45	550.67	11.57	13.24
Millet	*	*	*	*	*
Oats	*	*	*	*	*
Pulses	23.33	6.43	161.63	3.40	6.93
Horse Beans	13.24	3.65	93.01	1.95	7.02
Field Peas	5.67	1.56	34.17	.72	6.03
Haricot Beans	2.75	.76	*	*	*
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	15.18	4.18	32.07	.67	2.11
Neug	*	*	23.63	.50	*
Linseed	2.82	.78	8.25	.17	2.93
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	-	-	-	-	-
All Crops	363.11	100.00	4,758.63	100.00	-

Table 7.5 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

West Shewa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	487.52	81.98	6,268.28	87.19	12.86
Teff	237.47	39.93	2,419.16	33.65	10.19
Barley	67.58	11.36	833.30	11.59	12.33
Wheat	102.20	17.19	1,421.19	19.77	13.91
Maize	54.09	9.10	1,172.42	16.31	21.68
Sorghum	25.42	4.27	414.47	5.77	16.30
Millet	-	-	-	-	-
Oats	*	*	*	*	*
Pulses	78.84	13.26	792.51	11.02	10.05
Horse Beans	23.19	3.90	250.44	3.48	10.80
Field Peas	*	*	*	*	*
Haricot Beans	.48	.08	*	*	*
Chick Peas	30.02	5.05	319.29	4.44	10.64
Lentils	5.21	.88	24.75	.34	4.75
Vetch	15.23	2.56	160.59	2.23	10.54
Others	28.31	4.76	128.30	1.78	4.53
Neug	12.11	2.04	34.78	.48	2.87
Linseed	10.54	1.77	58.79	.82	5.58
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	.92	.15	1.93	.03	2.10
All Crops	594.67	100.00	7,189.10	100.00	-

Table 7.6 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

North Shewa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	257.48	74.63	2,487.44	76.22	9.66
Teff	93.27	27.04	733.35	22.47	7.86
Barley	67.49	19.56	717.26	21.98	10.63
Wheat	69.35	20.10	740.27	22.68	10.67
Maize	3.41	.99	40.43	1.24	11.86
Sorghum	22.87	6.63	250.16	7.67	10.94
Millet	*	*	-	-	-
Oats	.97	.28	5.97	.18	6.15
Pulses	71.46	20.71	724.37	22.20	10.14
Horse Beans	36.74	10.65	448.91	13.75	12.22
Field Peas	8.75	2.54	80.52	2.47	9.20
Haricot Beans	.12	.03	*	*	*
Chick Peas	*	*	*	*	*
Lentils	9.66	2.80	57.04	1.75	5.90
Vetch	7.60	2.20	64.05	1.96	8.43
Others	16.05	4.65	51.84	1.59	3.23
Neug	8.70	2.52	27.18	.83	3.12
Linseed	6.45	1.87	19.99	.61	3.10
Rapeseed	.33	.10	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	-	-	-	-	-
Fenugreek	.49	.14	2.18	.07	4.45
All Crops	344.99	100.00	3,263.64	100.00	-

Table 7.7 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

East Shewa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	307.10	81.23	4,639.23	85.34	15.11
Teff	99.02	26.19	932.83	17.16	9.42
Barley	8.97	2.37	102.81	1.89	11.46
Wheat	68.68	18.17	1,185.96	21.82	17.27
Maize	121.68	32.18	2,331.47	42.89	19.16
Sorghum	8.20	2.17	80.43	1.48	9.81
Millet	.41	.11	*	*	*
Oats	*	*	*	*	*
Pulses	68.18	18.03	768.20	14.13	11.27
Horse Beans	7.74	2.05	98.52	1.81	12.73
Field Peas	7.71	2.04	78.44	1.44	10.17
Haricot Beans	25.23	6.67	209.56	3.86	8.31
Chick Peas	15.94	4.22	*	*	*
Lentils	6.50	1.72	42.70	.79	6.57
Vetch	5.06	1.34	*	*	*
Others	2.80	.74	28.60	.53	10.21
Neug	*	*	-	-	-
Linseed	.17	.04	*	*	*
Rapeseed	.94	.25	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	378.08	100.00	5,436.03	100.00	-

Table 7.8 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Arsi

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	496.56	81.09	6,816.97	86.86	13.73
Teff	75.43	12.32	526.94	6.71	6.99
Barley	119.95	19.59	1,743.09	22.21	14.53
Wheat	201.04	32.83	3,109.35	39.62	15.47
Maize	70.59	11.53	1,093.26	13.93	15.49
Sorghum	23.97	3.91	272.20	3.47	11.36
Millet	*	*	-	-	-
Oats	*	*	*	*	*
Pulses	59.71	9.75	678.53	8.65	11.36
Horse Beans	40.28	6.58	554.38	7.06	13.76
Field Peas	11.81	1.93	86.04	1.10	7.29
Haricot Beans	*	*	*	*	*
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	*	*	*	*	*
Others	56.08	9.16	352.99	4.50	6.29
Neug	*	*	*	*	*
Linseed	44.87	7.33	296.64	3.78	6.61
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	-	-	-
Sesame	*	*	-	-	-
Fenugreek	*	*	*	*	*
All Crops	612.34	100.00	7,848.49	100.00	-

Table 7.9 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

West Harerge

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	192.04	89.33	2,931.85	91.80	15.27
Teff	10.81	5.03	133.10	4.17	12.31
Barley	5.68	2.64	72.93	2.28	12.84
Wheat	3.64	1.69	59.76	1.87	16.42
Maize	80.45	37.42	1,243.84	38.95	15.46
Sorghum	89.51	41.64	1,400.39	43.85	15.65
Millet	1.23	.57	*	*	*
Oats	.73	.34	9.60	.30	13.15
Pulses	20.95	9.75	248.36	7.78	11.85
Horse Beans	5.42	2.52	63.57	1.99	11.73
Field Peas	1.72	.80	12.65	.40	7.35
Haricot Beans	11.52	5.36	149.13	4.67	12.95
Chick Peas	1.05	.49	14.41	.45	13.72
Lentils	.95	.44	4.85	.15	5.11
Vetch	*	*	*	*	*
Others	1.98	.92	13.46	.42	6.80
Neug	*	*	-	-	-
Linseed	.43	.20	2.95	.09	6.86
Rapeseed	*	*	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	*	*	-	-	-
Sesame	*	*	*	*	*
Fenugreek	.46	.21	*	*	*
All Crops	214.97	100.00	3,193.67	100.00	-

Table 7.10 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

East Harerge

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	174.17	85.71	2,631.57	88.31	15.11
Teff	4.05	1.99	32.15	1.08	7.94
Barley	3.65	1.80	57.50	1.93	15.75
Wheat	16.10	7.92	333.71	11.20	20.73
Maize	62.54	30.78	1,196.98	40.17	19.14
Sorghum	86.68	42.66	987.17	33.13	11.39
Millet	-	-	-	-	-
Oats	*	*	*	*	*
Pulses	16.60	8.17	233.18	7.82	14.05
Horse Beans	6.92	3.41	106.46	3.57	15.38
Field Peas	1.81	.89	*	*	*
Haricot Beans	7.46	3.67	106.97	3.59	14.34
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	.12	.06	*	*	*
Rapeseed	*	*	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	.22	.11	1.38	.05	6.27
All Crops	203.21	100.00	2,979.97	100.00	-

Table 7.11 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Bale

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	252.16	84.37	4,177.41	91.94	16.57
Teff	39.82	13.32	344.95	7.59	8.66
Barley	56.51	18.91	941.35	20.72	16.66
Wheat	111.65	37.36	2,210.54	48.65	19.80
Maize	19.70	6.59	317.63	6.99	16.12
Sorghum	8.61	2.88	*	*	*
Millet	-	-	-	-	-
Oats	15.88	5.31	224.32	4.94	14.13
Pulses	26.99	9.03	254.96	5.61	9.45
Horse Beans	8.86	2.96	103.32	2.27	11.66
Field Peas	8.21	2.75	72.40	1.59	8.82
Haricot Beans	.89	.30	4.49	.10	5.04
Chick Peas	*	*	*	*	*
Lentils	2.10	.70	9.53	.21	4.54
Vetch	*	*	*	*	*
Others	19.72	6.60	111.14	2.45	5.64
Neug	*	*	*	*	*
Linseed	17.91	5.99	100.75	2.22	5.63
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	-	-	-
Sesame	-	-	-	-	-
Fenugreek	1.38	.46	7.56	.17	5.48
All Crops	298.88	100.00	4,543.51	100.00	-

Table 7.12 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Borena

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	86.56	86.04	1,051.75	92.76	12.15
Teff	9.05	9.00	53.98	4.76	5.96
Barley	23.81	23.67	260.61	22.98	10.95
Wheat	7.64	7.59	*	*	*
Maize	45.34	45.07	671.77	59.25	14.82
Sorghum	*	*	*	*	*
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	14.01	13.93	81.93	7.23	5.85
Horse Beans	3.13	3.11	27.37	2.41	8.74
Field Peas	*	*	*	*	*
Haricot Beans	6.89	6.85	26.25	2.32	3.81
Chick Peas	.22	.22	*	*	*
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	*	*	*	*	*
Rapeseed	*	*	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	*	*	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	100.61	100.00	1,133.86	100.00	-

Table 8. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Somale

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	57.95	97.02	443.16	97.88	7.65
Teff	*	*	-	-	-
Barley	3.22	5.39	19.46	4.30	6.04
Wheat	3.45	5.78	19.68	4.35	5.70
Maize	26.57	44.48	190.49	42.07	7.17
Sorghum	24.51	41.03	212.83	47.01	8.68
Millet	-	-	-	-	-
Oats	.15	.25	*	*	*
Pulses	.88	1.47	4.02	.89	4.57
Horse Beans	-	-	-	-	-
Field Peas	*	*	-	-	-
Haricot Beans	.70	1.17	2.91	.64	4.16
Chick Peas	.15	.25	*	*	*
Lentils	*	*	-	-	-
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	*	*	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	.07	.12	.19	.04	2.71
All Crops	59.73	100.00	452.74	100.00	-

Table 8.1 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Shinele

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	.91	100.00	10.30	99.90	11.32
Teff	-	-	-	-	-
Barley	-	-	-	-	-
Wheat	-	-	-	-	-
Maize	.11	12.09	.90	8.73	8.18
Sorghum	.80	87.91	9.39	91.08	11.74
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	-	-	*	*	-
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	-	-	*	*	-
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	-	-	-	-	-
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	.91	100.00	10.31	100.00	-

Table 8.2 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Jijiga

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	51.83	97.63	414.48	98.24	8.00
Teff	*	*	-	-	-
Barley	3.22	6.07	19.46	4.61	6.04
Wheat	3.33	6.27	19.39	4.60	5.82
Maize	22.14	41.70	173.07	41.02	7.82
Sorghum	22.93	43.19	201.86	47.85	8.80
Millet	-	-	-	-	-
Oats	.15	.28	*	*	*
Pulses	.54	1.02	2.10	.50	3.89
Horse Beans	-	-	-	-	-
Field Peas	*	*	-	-	-
Haricot Beans	.36	.68	.99	.23	2.75
Chick Peas	.15	.28	*	*	*
Lentils	*	*	-	-	-
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	*	*	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	.07	.13	.19	.05	2.71
All Crops	53.09	100.00	421.90	100.00	-

Table 8.3 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Moyale

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	5.22	91.10	*	*	*
Teff	-	-	-	-	-
Barley	-	-	-	-	-
Wheat	*	*	*	*	*
Maize	4.32	75.39	*	*	*
Sorghum	*	*	*	*	*
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	.34	5.93	*	*	*
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	.34	5.93	*	*	*
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	-	-	-	-	-
All Crops	5.73	100.00	*	*	-

Table 9. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Benshangul-Gumuz

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	129.99	75.39	1,578.53	89.63	12.14
Teff	16.95	9.83	97.77	5.55	5.77
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	26.67	15.47	473.78	26.90	17.76
Sorghum	61.07	35.42	754.67	42.85	12.36
Millet	22.69	13.16	231.64	13.15	10.21
Oats	*	*	-	-	-
Pulses	5.09	2.95	40.20	2.28	7.90
Horse Beans	1.04	.60	9.90	.56	9.52
Field Peas	.37	.21	*	*	*
Haricot Beans	3.16	1.83	24.04	1.36	7.61
Chick Peas	.43	.25	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	37.34	21.66	142.48	8.09	3.82
Neug	24.81	14.39	77.14	4.38	3.11
Linseed	.31	.18	.64	.04	2.06
Rapeseed	.10	.06	*	*	*
Ground Nuts	3.03	1.76	*	*	*
Sunflower	*	*	*	*	*
Sesame	9.01	5.23	38.45	2.18	4.27
Fenugreek	.03	.02	.07	*	2.33
All Crops	172.42	100.00	1,761.20	100.00	-

Table 9.1 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Metekel

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	70.65	75.23	871.45	88.42	12.33
Teff	9.69	10.32	72.56	7.36	7.49
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	10.71	11.40	226.74	23.01	21.17
Sorghum	27.33	29.10	339.85	34.48	12.44
Millet	20.46	21.79	212.55	21.57	10.39
Oats	*	*	-	-	-
Pulses	4.06	4.32	34.89	3.54	8.59
Horse Beans	.94	1.00	9.39	.95	9.99
Field Peas	*	*	*	*	*
Haricot Beans	2.55	2.72	*	*	*
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	19.19	20.43	79.20	8.04	4.13
Neug	11.35	12.09	35.29	3.58	3.11
Linseed	.10	.11	*	*	*
Rapeseed	.09	.10	*	*	*
Ground Nuts	*	*	*	*	*
Sunflower	*	*	*	*	*
Sesame	5.51	5.87	22.02	2.23	4.00
Fenugreek	*	*	-	-	-
All Crops	93.91	100.00	985.54	100.00	-

Table 9.2 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Asosa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	44.41	73.64	476.74	90.25	10.73
Teff	6.62	10.98	21.74	4.12	3.28
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	11.21	18.59	159.56	30.21	14.23
Sorghum	25.01	41.47	283.84	53.73	11.35
Millet	1.42	2.35	10.69	2.02	7.53
Oats	-	-	-	-	-
Pulses	.58	.96	2.18	.41	3.76
Horse Beans	*	*	*	*	*
Field Peas	*	*	*	*	*
Haricot Beans	.21	.35	*	*	*
Chick Peas	*	*	.52	.10	*
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	15.32	25.40	49.32	9.34	3.22
Neug	12.85	21.31	39.48	7.47	3.07
Linseed	.21	.35	.44	.08	2.10
Rapeseed	*	*	-	-	-
Ground Nuts	.90	1.49	4.24	.80	4.71
Sunflower	-	-	-	-	-
Sesame	1.34	2.22	5.16	.98	3.85
Fenugreek	-	-	-	-	-
All Crops	60.31	100.00	528.24	100.00	-

Table 9.3 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Kemashi

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	14.93	82.03	230.34	93.09	15.43
Teff	*	*	*	*	*
Barley	-	-	-	-	-
Wheat	-	-	*	*	-
Maize	4.74	26.04	87.49	35.36	18.46
Sorghum	8.73	47.97	130.98	52.94	15.00
Millet	.81	4.45	8.40	3.39	10.37
Oats	-	-	-	-	-
Pulses	.45	2.47	3.12	1.26	6.93
Horse Beans	*	*	*	*	*
Field Peas	*	*	-	-	-
Haricot Beans	.40	2.20	2.95	1.19	7.38
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	2.83	15.55	13.96	5.64	4.93
Neug	.61	3.35	2.37	.96	3.89
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	.03	.16	*	*	*
Sunflower	*	*	*	*	*
Sesame	2.16	11.87	11.28	4.56	5.22
Fenugreek	.02	.11	.07	.03	3.50
All Crops	18.20	100.00	247.43	100.00	-

Table 10. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

(S.N.N.P.R)

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	904.75	84.33	11,533.45	90.46	12.75
Teff	174.36	16.25	1,206.43	9.46	6.92
Barley	118.41	11.04	1,231.28	9.66	10.40
Wheat	105.79	9.86	1,800.38	14.12	17.02
Maize	344.80	32.14	5,792.74	45.44	16.80
Sorghum	153.80	14.34	1,465.71	11.50	9.53
Millet	7.52	.70	36.47	.29	4.85
Oats	.09	.01	.44	*	4.89
Pulses	161.94	15.09	1,191.03	9.34	7.35
Horse Beans	52.15	4.86	404.42	3.17	7.75
Field Peas	42.38	3.95	225.05	1.77	5.31
Haricot Beans	58.86	5.49	500.96	3.93	8.51
Chick Peas	6.70	.62	*	*	*
Lentils	.61	.06	1.63	.01	2.67
Vetch	*	*	*	*	*
Others	6.12	.57	24.63	.19	4.02
Neug	*	*	*	*	*
Linseed	1.51	.14	4.79	.04	3.17
Rapeseed	2.17	.20	8.39	.07	3.87
Ground Nuts	.07	.01	*	*	*
Sunflower	.42	.04	*	*	*
Sesame	*	*	*	*	*
Fenugreek	.20	.02	*	*	*
All Crops	1,072.81	100.00	12,749.12	100.00	-

Table 10.1 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Gurage

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	145.20	85.00	2,148.68	89.80	14.80
Teff	38.23	22.38	300.46	12.56	7.86
Barley	23.00	13.46	360.76	15.08	15.69
Wheat	19.59	11.47	301.67	12.61	15.40
Maize	47.81	27.99	982.35	41.05	20.55
Sorghum	16.52	9.67	203.27	8.49	12.30
Millet	*	*	-	-	-
Oats	*	*	*	*	*
Pulses	23.40	13.70	234.82	9.81	10.04
Horse Beans	8.48	4.96	89.90	3.76	10.60
Field Peas	*	*	58.83	2.46	*
Haricot Beans	*	*	*	*	*
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	*	*	*	*	*
Others	2.23	1.31	9.35	.39	4.19
Neug	*	*	*	*	*
Linseed	.23	.13	*	*	*
Rapeseed	.36	.21	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	170.83	100.00	2,392.85	100.00	-

Table 10.2 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Hadiya

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	111.29	91.48	1,789.91	95.29	16.08
Teff	23.06	18.96	177.49	9.45	7.70
Barley	4.72	3.88	87.56	4.66	18.55
Wheat	43.33	35.62	936.42	49.85	21.61
Maize	28.55	23.47	474.18	25.24	16.61
Sorghum	11.24	9.24	111.42	5.93	9.91
Millet	*	*	*	*	*
Oats	-	-	-	-	-
Pulses	9.60	7.89	84.92	4.52	8.85
Horse Beans	6.41	5.27	59.76	3.18	9.32
Field Peas	1.98	1.63	15.12	.80	7.64
Haricot Beans	1.03	.85	9.26	.49	8.99
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	.76	.62	*	*	*
Neug	-	-	-	-	-
Linseed	.28	.23	*	*	*
Rapeseed	.46	.38	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	121.65	100.00	1,878.32	100.00	-

Table 10.3 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Kembata Alaba Tembaro

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	72.79	92.62	1,097.88	96.23	15.08
Teff	11.77	14.98	79.06	6.93	6.72
Barley	1.53	1.95	16.28	1.43	10.64
Wheat	17.45	22.20	270.05	23.67	15.48
Maize	33.18	42.22	652.05	57.15	19.65
Sorghum	6.69	8.51	57.05	5.00	8.53
Millet	2.15	2.74	23.37	2.05	10.87
Oats	*	*	*	*	*
Pulses	5.27	6.71	40.82	3.58	7.75
Horse Beans	*	*	26.69	2.34	*
Field Peas	.42	.53	2.61	.23	6.21
Haricot Beans	1.63	2.07	11.16	.98	6.85
Chick Peas	.15	.19	.23	.02	1.53
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	.53	.67	2.16	.19	4.08
Neug	-	-	-	-	-
Linseed	.11	.14	.28	.02	2.55
Rapeseed	.27	.34	1.16	.10	4.30
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	.15	.19	*	*	*
All Crops	78.59	100.00	1,140.85	100.00	-

Table 10.4 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Sidama

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	69.55	76.45	1,039.51	84.99	14.95
Teff	2.82	3.10	14.73	1.20	5.22
Barley	13.10	14.40	168.45	13.77	12.86
Wheat	*	*	*	*	*
Maize	48.13	52.91	777.03	63.53	16.14
Sorghum	.89	.98	*	*	*
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	20.50	22.53	181.84	14.87	8.87
Horse Beans	4.28	4.70	30.77	2.52	7.19
Field Peas	*	*	*	*	*
Haricot Beans	13.62	14.97	133.22	10.89	9.78
Chick Peas	*	*	*	*	*
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	*	*	1.80	.15	*
Neug	-	-	-	-	-
Linseed	*	*	*	*	*
Rapeseed	*	*	1.74	.14	*
Ground Nuts	*	*	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	90.97	100.00	1,223.15	100.00	-

Table 10.5 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Gedio

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	14.53	78.75	218.91	90.20	15.07
Teff	*	*	*	*	*
Barley	3.95	21.41	*	*	*
Wheat	*	*	*	*	*
Maize	9.22	49.97	164.87	67.93	17.88
Sorghum	.07	.38	*	*	*
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	3.86	20.92	23.75	9.79	6.15
Horse Beans	2.55	13.82	19.27	7.94	7.56
Field Peas	.87	4.72	*	*	*
Haricot Beans	*	*	*	*	*
Chick Peas	-	-	-	-	-
Lentils	*	*	-	-	-
Vetch	-	-	-	-	-
Others	.06	.33	*	*	*
Neug	-	-	-	-	-
Linseed	.01	.05	-	-	-
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	18.45	100.00	242.69	100.00	-

Table 10.6 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

North Omo

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	277.70	84.27	3,004.40	90.67	10.82
Teff	62.04	18.83	402.56	12.15	6.49
Barley	50.99	15.47	*	*	*
Wheat	8.49	2.58	*	*	*
Maize	116.02	35.21	1,732.84	52.30	14.94
Sorghum	39.48	11.98	374.34	11.30	9.48
Millet	*	*	*	*	*
Oats	*	*	*	*	*
Pulses	51.12	15.51	306.57	9.25	6.00
Horse Beans	11.03	3.35	59.58	1.80	5.40
Field Peas	*	*	*	*	*
Haricot Beans	23.06	7.00	187.44	5.66	8.13
Chick Peas	*	*	*	*	*
Lentils	*	*	-	-	-
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	*	*	*	*	*
Linseed	*	*	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	*	*	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	-	-	-
All Crops	329.53	100.00	3,313.42	100.00	-

Table 10.7 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

South Omo

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	64.33	87.83	489.00	88.68	7.60
Teff	5.91	8.07	31.35	5.69	5.30
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	14.89	20.33	183.83	33.34	12.35
Sorghum	30.69	41.90	195.44	35.44	6.37
Millet	*	*	*	*	*
Oats	-	-	-	-	-
Pulses	8.44	11.52	58.52	10.61	6.93
Horse Beans	1.58	2.16	10.41	1.89	6.59
Field Peas	*	*	*	*	*
Haricot Beans	5.18	7.07	38.66	7.01	7.46
Chick Peas	*	*	-	-	-
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	.47	.64	*	*	*
Neug	-	-	-	-	-
Linseed	*	*	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	*	*	-	-	-
Sunflower	.38	.52	*	*	*
Sesame	*	*	*	*	*
Fenugreek	-	-	-	-	-
All Crops	73.24	100.00	551.42	100.00	-

Table 10.8 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Kefa-Sheka

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	65.67	74.71	821.04	86.77	12.50
Teff	15.48	17.61	92.23	9.75	5.96
Barley	8.05	9.16	63.33	6.69	7.87
Wheat	5.16	5.87	51.35	5.43	9.95
Maize	22.03	25.06	414.75	43.83	18.83
Sorghum	14.62	16.63	198.29	20.96	13.56
Millet	*	*	*	*	*
Oats	*	*	-	-	-
Pulses	22.01	25.04	124.61	13.17	5.66
Horse Beans	10.65	12.12	70.24	7.42	6.60
Field Peas	9.44	10.74	41.63	4.40	4.41
Haricot Beans	1.91	2.17	12.75	1.35	6.68
Chick Peas	-	-	-	-	-
Lentils	*	*	-	-	-
Vetch	-	-	-	-	-
Others	.23	.26	.59	.06	2.57
Neug	*	*	*	*	*
Linseed	*	*	*	*	*
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	87.90	100.00	946.25	100.00	-

Table 10.9 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Bench-Maji

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	27.14	88.03	424.63	92.25	15.65
Teff	3.05	9.89	21.66	4.71	7.10
Barley	1.00	3.24	7.46	1.62	7.46
Wheat	.29	.94	*	*	*
Maize	12.96	42.04	276.43	60.05	21.33
Sorghum	*	*	*	*	*
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	3.68	11.94	35.66	7.75	9.69
Horse Beans	1.94	6.29	19.05	4.14	9.82
Field Peas	.79	2.56	7.32	1.59	9.27
Haricot Beans	.94	3.05	*	*	*
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	30.83	100.00	460.30	100.00	-

Table 10.10 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Yem Special Wereda

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	12.25	80.54	122.11	84.28	9.97
Teff	4.29	28.21	30.84	21.29	7.19
Barley	1.66	10.91	12.97	8.95	7.81
Wheat	3.61	23.73	33.75	23.30	9.35
Maize	2.06	13.54	38.16	26.34	18.52
Sorghum	.60	3.94	6.22	4.29	10.37
Millet	*	*	*	*	*
Oats	.02	.13	.14	.10	7.00
Pulses	2.86	18.80	22.40	15.46	7.83
Horse Beans	1.81	11.90	15.93	11.00	8.80
Field Peas	.86	5.65	5.65	3.90	6.57
Haricot Beans	*	*	*	*	*
Chick Peas	*	*	*	*	*
Lentils	.17	1.12	.65	.45	3.82
Vetch	-	-	-	-	-
Others	.09	.59	.36	.25	4.00
Neug	*	*	*	*	*
Linseed	*	*	*	*	*
Rapeseed	.02	.13	.10	.07	5.00
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	.01	.01	-
All Crops	15.21	100.00	144.88	100.00	-

Table 10.11 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Amaro Special Wereda

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	5.36	75.39	63.31	84.30	11.81
Teff	2.00	28.13	*	*	*
Barley	1.38	19.41	11.69	15.57	8.47
Wheat	.51	7.17	6.48	8.63	12.71
Maize	1.00	14.06	*	*	*
Sorghum	*	*	*	*	*
Millet	-	-	*	*	-
Oats	-	-	-	-	-
Pulses	1.72	24.19	11.62	15.47	6.76
Horse Beans	.33	4.64	2.44	3.25	7.39
Field Peas	.74	10.41	4.11	5.47	5.55
Haricot Beans	.35	4.92	2.67	3.56	7.63
Chick Peas	*	*	*	*	*
Lentils	.08	1.13	.30	.40	3.75
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	*	*	*	*	*
Linseed	-	-	-	-	-
Rapeseed	*	*	-	-	-
Ground Nuts	-	-	*	*	-
Sunflower	*	*	*	*	*
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	7.11	100.00	75.10	100.00	-

Table 10.12 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Burji Special Wereda

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	3.09	63.58	23.96	62.90	7.75
Teff	.84	17.28	6.59	17.30	7.85
Barley	.32	6.58	2.20	5.78	6.88
Wheat	.50	10.29	3.83	10.06	7.66
Maize	.38	7.82	4.12	10.82	10.84
Sorghum	1.05	21.60	7.21	18.93	6.87
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.74	35.80	14.07	36.94	8.09
Horse Beans	*	*	*	*	*
Field Peas	*	*	*	*	*
Haricot Beans	1.41	29.01	11.77	30.90	8.35
Chick Peas	.26	5.35	1.95	5.12	7.50
Lentils	.03	.62	.14	.37	4.67
Vetch	-	-	*	*	-
Others	.03	.62	.06	.16	2.00
Neug	-	-	-	-	-
Linseed	.01	.21	.04	.11	4.00
Rapeseed	.01	.21	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	.01	.21	.02	.05	2.00
All Crops	4.86	100.00	38.09	100.00	-

Table 10.13 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Konso Special Wereda

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	22.02	80.34	148.91	80.67	6.76
Teff	3.21	11.71	16.03	8.68	4.99
Barley	.16	.58	*	*	*
Wheat	*	*	*	*	*
Maize	5.11	18.64	47.54	25.75	9.30
Sorghum	13.45	49.07	83.72	45.35	6.22
Millet	.04	.15	*	*	*
Oats	-	-	-	-	-
Pulses	5.37	19.59	35.48	19.22	6.61
Horse Beans	*	*	*	*	*
Field Peas	.07	.26	*	*	*
Haricot Beans	4.85	17.69	32.93	17.84	6.79
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	.02	.07	*	*	*
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	.02	.07	*	*	*
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	27.41	100.00	184.60	100.00	-

Table 10.14 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Derashe Special Wereda

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	13.84	85.27	141.21	89.83	10.20
Teff	1.18	7.27	8.27	5.26	7.01
Barley	.74	4.56	5.28	3.36	7.14
Wheat	.29	1.79	*	*	*
Maize	3.45	21.26	29.74	18.92	8.62
Sorghum	8.19	50.46	95.44	60.71	11.65
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	2.37	14.60	15.96	10.15	6.73
Horse Beans	.07	.43	*	*	*
Field Peas	.19	1.17	*	*	*
Haricot Beans	1.32	8.13	8.60	5.47	6.52
Chick Peas	.75	4.62	5.77	3.67	7.69
Lentils	*	*	*	*	*
Vetch	*	*	*	*	*
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	*	*	-	-	-
Fenugreek	-	-	*	*	-
All Crops	16.23	100.00	157.20	100.00	-

Table 11. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Gambella

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	13.44	94.38	301.56	98.47	22.44
Teff	-	-	-	-	-
Barley	*	*	*	*	*
Wheat	-	-	-	-	-
Maize	8.79	61.73	244.20	79.74	27.78
Sorghum	4.54	31.88	57.20	18.68	12.60
Millet	*	*	*	*	*
Oats	-	-	-	-	-
Pulses	*	*	*	*	*
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	*	*	*	*	*
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	.03	.21	*	*	*
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	-	-	-	-	-
All Crops	14.24	100.00	306.26	100.00	-

Table 12 Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Harari

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	6.40	83.33	50.11	86.74	7.83
Teff	-	-	*	*	-
Barley	.06	.78	.57	.99	9.50
Wheat	.27	3.52	2.12	3.67	7.85
Maize	1.08	14.06	9.60	16.62	8.89
Sorghum	4.99	64.97	37.81	65.45	7.58
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	.09	1.17	.32	.55	3.56
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	.06	.78	.20	.35	3.33
Chick Peas	*	*	*	*	*
Lentils	-	-	*	*	-
Vetch	-	-	-	-	-
Others	1.19	15.49	7.34	12.71	6.17
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	1.18	15.36	7.30	12.64	6.19
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	-	-	-	-	-
All Crops	7.68	100.00	57.77	100.00	-

Table 13. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Addis Ababa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	9.52	81.51	117.81	79.67	12.38
Teff	5.29	45.29	51.08	34.54	9.66
Barley	*	*	*	*	*
Wheat	3.99	34.16	64.49	43.61	16.16
Maize	.03	.26	-	-	-
Sorghum	.02	.17	*	*	*
Millet	-	-	-	-	-
Oats	*	*	*	*	*
Pulses	2.05	17.55	29.38	19.87	14.33
Horse Beans	*	*	1.61	1.09	*
Field Peas	.02	.17	.16	.11	8.00
Haricot Beans	-	-	-	-	-
Chick Peas	.83	7.11	12.37	8.37	14.90
Lentils	.21	1.80	1.57	1.06	7.48
Vetch	.87	7.45	13.66	9.24	15.70
Others	.11	.94	.69	.47	6.27
Neug	-	-	-	-	-
Linseed	.01	.09	*	*	*
Rapeseed	-	-	*	*	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	.10	.86	.61	.41	6.10
All Crops	11.68	100.00	147.87	100.00	-

Table 13. Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings 2000/2001 (1993 E.C.)

Dire Dawa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	7.45	92.89	68.44	92.54	9.19
Teff	-	-	-	-	-
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	.37	4.61	4.10	5.54	11.08
Sorghum	7.06	88.03	64.24	86.86	9.10
Millet	-	-	-	-	-
Oats	-	-	*	*	-
Pulses	.51	6.36	5.15	6.96	10.10
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	.51	6.36	5.13	6.94	10.06
Chick Peas	-	-	-	-	-
Lentils	-	-	*	*	-
Vetch	-	-	-	-	-
Others	.06	.75	.37	.50	6.17
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	-	-	-	-	-
Sesame	.02	.25	*	*	*
Fenugreek	-	-	*	*	-
All Crops	8.02	100.00	73.96	100.00	-

APPENDIX I

**ESTIMATION PROCEDURES OF TOTAL, RATIO AND
SAMPLING ERRORS**



APPENDIX I

ESTIMATION PROCEDURES OF TOTALS, RATIOS AND SAMPLING ERRORS

The following formulas were used to estimate total area of land under specific crop, level of production and yield of specific crop in a stratum.

1. For estimating total area of land under specific crop:

$$\hat{A}_h = \sum_{i=1}^{n_h} W_{hi} a_{hi}$$

in which

$$W_{hi} = \frac{N_h M_{hi}}{n_h N_{hi} m_{hi}}$$

is the weight.

Where:

h represents the stratum.

n_h is the total number of sample EAs successfully covered in the h^{th} stratum.

N_h is the measure of size of the h^{th} stratum as obtained from the sampling frame.

N_{hi} is the measure of size of the i^{th} sample EA in the h^{th} stratum obtained from the sampling frame.

M_{hi} is the total number of agricultural households of the i^{th} sample EA in the h^{th} stratum obtained from household listing of the survey.

m_{hi} is number of sample agricultural households successfully covered in the i^{th} sample EA in the h^{th} stratum.

a_{hi} is the sample total of values of area in the i^{th} EA in the h^{th} stratum under a specific crop.

\hat{A}_h is estimate of total area under specific crop in the h^{th} stratum.

2. For estimating level of production:

$$\hat{P}_h = \sum_{i=1}^{n_h} W_{hi} P_{hi}$$

in which

$$P_{hi} = a_{hi} \times \bar{Y}_{hi}$$

where:

$$\bar{Y}_{hi} = \frac{Y_{hi}}{16C_{hi}}$$

Note: W_{hi} and a_{hi} are as defined above

- Where :
- Y_{hi} is sampled total of yield of a specific crop from 16 m² area of land for crop cutting of crop in the ith EA in the hth stratum.
 - C_{hi} is number of crop cutting of a specific crop in the ith EA in the hth stratum.
 - \bar{Y}_{hi} is average yield per square meter of a specific crop in the ith EA in the hth stratum.
 - P_{hi} is estimate of total production of a specific crop in the ith EA in the hth stratum.
 - \hat{P}_h is estimate of total production quantity of a specific crop in the hth stratum.

3. Estimate of yield of a specific crop is given by:

$$\hat{Y}_h = \frac{\hat{P}_h}{\hat{A}_h}$$

4. Sampling variance of estimates:

Sampling variance of estimate of stratum total of area, production and yield for a specific crop are estimated by the following formulas, respectively.

$$ar(\hat{A}_h) = \frac{n_h}{n_h - 1} \left[\sum_{i=1}^{n_h} \hat{A}_{hi}^2 - \frac{\hat{A}_h^2}{n_h} \right]$$

$$ar(\hat{P}_h) = \frac{n_h}{n_h - 1} \left[\sum_{i=1}^{n_h} \hat{P}_{hi}^2 - \frac{\hat{P}_h^2}{n_h} \right]$$

$$ar(\hat{Y}_h) = \frac{1}{\hat{A}_h^2} [Var(\hat{P}_h) + \hat{Y}_h^2 Var(\hat{A}_h) - 2\hat{Y}_h Cov(\hat{P}_h, \hat{A}_h)]$$

Where

$$Cov(\hat{P}_h, \hat{A}_h) = \frac{n_h}{n_h - 1} \left[\sum_{i=1}^{n_h} (\hat{A}_{hi} - \frac{\hat{A}_h}{n_h}) (\hat{P}_{hi} - \frac{\hat{P}_h}{n_h}) \right]$$

In estimating the sampling variance by the above formula, selection of EAs within a stratum is assumed to be with replacement. By so doing the variance estimate may be slightly over estimated but it greatly simplifies the estimation procedure. Furthermore the finite population correction (fpc) is ignored in the formula. This is due to the fact that its effect is negligible.

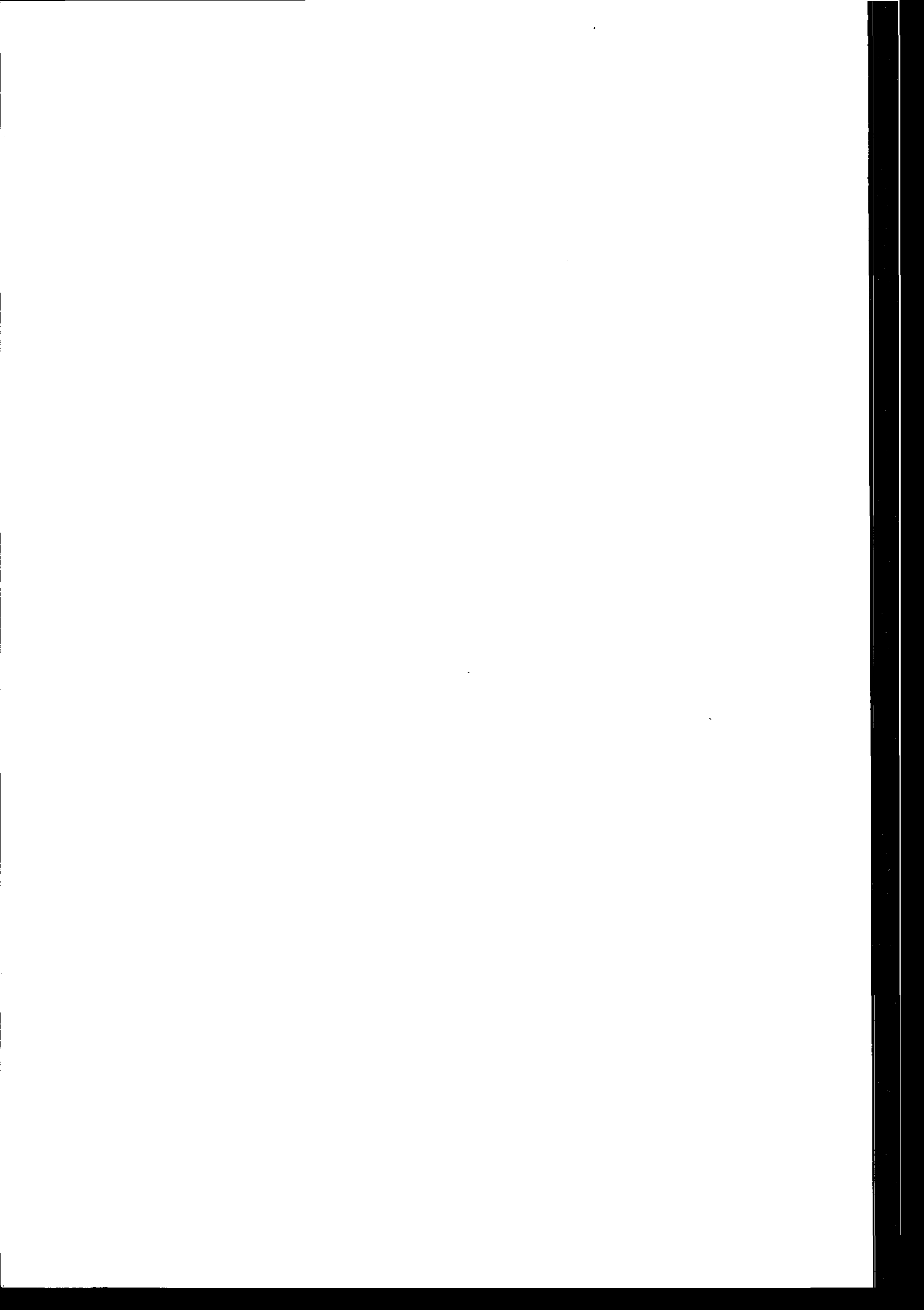
5. Coefficient of Variation (CV) of estimates:

Coefficient of Variation (CV) in percentage of estimate of stratum total of area, production and yield for a specific crop are given respectively by:

$$CV(\hat{A}_h) = \frac{\sqrt{Var(\hat{A}_h)}}{\hat{A}_h} \times 100$$

$$CV(\hat{P}_h) = \frac{\sqrt{Var(\hat{P}_h)}}{\hat{P}_h} \times 100$$

$$CV(\hat{Y}_h) = \frac{\sqrt{Var(\hat{Y}_h)}}{\hat{Y}_h} \times 100$$





APPENDIX III

- NUMBER OF EAs SAMPLED AND COVERED
- NUMBER OF HOUSEHOLDS EXPECTED TO BE COVERED AND ACTUALLY COVERED
- NUMBER OF PARCELS AND FIELDS MEASURED
- NUMBER OF CROP CUTTINGS PERFORMED



